

REMARKS

Claims 2 and 8-12 are pending in the present application.

In the office action mailed September 19, 2005, the Examiner objected to a listing of a reference in the specification as being an improper information disclosure statement and further objected to the title of the application. The Examiner further rejected claims 2 and 8 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,615,121 to Babayev *et al.* (the "Babayev patent"), and rejected claims 9-12 under 35 U.S.C. 103(a) as being unpatentable over the Babayev patent in view of U.S. Patent No. 5,848,395 to Edgar *et al.* (the "Edgar patent").

With respect to the Examiner's objection to the specification, at this time the reference identified by the Examiner is not considered prior art and consequently will not be disclosed as part of an information disclosure statement.

An information disclosure statement was submitted on September 19, 2005 (the "IDS"). Applicants request the Examiner consider the references cited in the Form PTO-1449 of the IDS and provide the attorney of record with a signed and initialed copy of the Form PTO-1449.

The title of the present application has been amended as suggested by the Examiner. The Examiner's objection to the title should now be withdrawn.

As previously mentioned, the Examiner rejected claims 2 and 8 under 35 U.S.C. 102(b) as being anticipated by the Babayev patent. Claims 2 and 8 are patentably distinct from the Babayev patent because the Babayev patent fails to disclose the combination of limitations recited by the respective claims. For example, the Babayev patent fails to disclose generating a list of schedulable time blocks for a shift identified in the opening and further fails to disclose generating a list of schedulable time blocks in a shift if there is no overlap. The Examiner argues that $xt(d)$ and the initialization process is analogous to generating a list of schedulable time blocks. *See* the Office Action at pages 4-9. However, the Examiner's characterization of the Babayev patent is not accurate. As defined in the Babayev patent, the term $xt(d)$ represents the number of resources for a predetermined day d not allocated to tasks at time slot t , $t=1, 2, \dots, T$. *See* col. 6, lines 20-22. The $xt(d)$ value is used in an objective function that is sought to be minimized. By minimizing the objective function, the total number of spare resources for the particular day is minimized, that is, underutilization of unallocated resources. *See* col. 7, lines 12-22. The evaluation of unassigned resources $xt(d)$ can occur as part of an initialization process

performed prior to execution of the scheduler, as shown in Figures 2A, step 104. *See* col. 7, lines 55-67. During the initialization, the number of unassigned resources that can be provided for tasks for each time slot for each day over a range of days is determined. Essentially, the initialization process provides a number representing the level of unallocated resources on a daily basis. The values of $xt(d)$ are used as a measure of whether there are sufficient resources in a day to complete a requested task and also whether there are further resources that can be allocated for the particular day d . *See* col. 78, lines 36-44 and Figure 2B, step 136; col. 10, lines 18-23 and Figure 2D, step 176.

The Examiner further argues that generating a list of schedulable time blocks is analogous to queuing a task r for assignment at a later time in the event a forecast of resources has not been made for at least one day of the preferred time interval. *See* the Office Action at pages 10-11. As described in the Babayev patent, a task request is received from a customer having a preferred time interval. *See* col. 8, lines 2-9 and Figure 2A, steps 108 and 112. If a forecast of resources has not been made for at least one of the days within the preferred time interval, the task r is queued for scheduling after a forecast of resources is made. *See* col. 8, lines 10-18 and Figure 2A, steps 116 and 120. Figure 3 illustrates a flow diagram for a process of assigning tasks to days that have not had resources forecasted. If resources for particular days are to be forecasted, then a forecast is made (step 308) and the $xt(d)$ value (the number of unallocated resources per day for completing tasks) is determined (step 312 of Figure 3 and step 104 of Figure 2A). However, if a forecast of resources is not to be performed, the tasks can be manually assigned to specific resources if desired (steps 316-340). If manual assignment of tasks is not desired, then the process of Figure 3 is terminated.

In contrast, schedulable time blocks represent ranges of time including free time blocks and/or virtual free time blocks. *See* paragraph [0034] (reference to U.S. Patent Application Publication No. US2001/0047288). As applied to the case where a customer specifies both an opening (e.g., a particular worker with a set of desired skills) and an appointment window, a list of schedulable time blocks is generated for the workers matching the customer criteria. *See id.* In assigning an order, a schedulable time block for a worker is selected from the list that includes an opening that falls within the time range defined by an overlap of the customer specified opening and appointment window. *See* paragraph [0035]. Where the customer specifies only an appointment window, the list of schedulable time blocks is

generated in response to not identifying an overlap between an opening and the customer specified appointment window. The list of schedulable time blocks can be generated on a shift-by-shift basis. That is, if a list of schedulable time blocks is evaluated for a schedulable time block having an opening that overlaps with the specified appointment window, then the order is assigned to the opening. However, if a schedulable time block is not identified, then another list of schedulable time blocks for another shift is generated. *See* paragraph [0039]. The schedulable time blocks provide additional openings that can be compared with the specified appointment window for an overlap and into which the order can be assigned.

In comparing the information compiled in the Babayev patent for the unallocated resources to which tasks can be assigned and the list of schedulable time blocks generated as recited by claims 2 and 8, it is apparent that the two are not analogous nor do they serve a similar purpose. With respect to the Examiner's first argument, the schedulable time blocks represent more than simply the number of unallocated resources per day $xt(d)$. As previously discussed, the $xt(d)$ value is a number that is used to measure how many resources are available for completing a task. The value $xt(d)$, however, does not represent a range of time or include openings into which orders can be assigned, as do the schedulable time blocks. With respect to the Examiner second argument, the process referenced by the Examiner does not "generate shift schedule openings if the customer appointment does not overlap with initial (existing) available shift schedule openings." *See* the Office Action at page 10. As previously discussed, the process illustrated by Figure 3 is directed to how to handle un-forecasted resources for a period of time in which tasks are to be performed. As further previously discussed, if forecasting is desired, then a forecast is made and the number of unallocated resources for completing tasks is resolved. Otherwise, the tasks can either be manually scheduled or not. Generating a list of schedulable time blocks as recited in the claims is not related to forecasting of resources or to a process of manually scheduling tasks. A schedulable time block is a range of time having openings to which orders can be assigned. The schedulable time blocks are for resources that are already available. Deciding whether to forecast or not is not relevant to generating a list of schedulable time blocks. Additionally, as previously discussed, schedulable time blocks and the list of schedulable time blocks are not the same as the $xt(d)$ number described in the Babayev patent, which represents unallocated resources on a per day basis, and is used in an objective function.

that is minimized so that resources for completing tasks are not wasted. Thus, the step 312 of Figure 3 bears no relationship to generating a list of schedulable time blocks either.

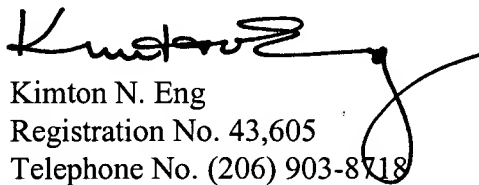
For the foregoing reasons, claims 2 and 8 are patentably distinct from the Babayev patent, and the rejection of claims 2 and 8 under 35 U.S.C. 102(b) should be withdrawn.

As previously mentioned, claims 9-12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Babayev patent in view of the Edgar patent. Without addressing the accuracy of the Examiner's characterization of the Edgar patent, or the merits of the Examiner's rejections, claims 9-12 are patentable because of their dependency from allowable base claim 8. That is, each of the dependent claims further narrows the scope of the claim from which it depends, and consequently, if a claim is dependent from an allowable base claim, the dependent claim is also allowable. For the foregoing reasons, the rejection of claims 9-12 under 35 U.S.C. 103(a) should be withdrawn.

All of the claims pending in the present application are in condition for allowance. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

DORSEY & WHITNEY LLP



Kimton N. Eng
Registration No. 43,605
Telephone No. (206) 903-8718

KNE:ajs

Enclosures:

Postcard

Check

Fee Transmittal Sheet (+ copy)

DORSEY & WHITNEY LLP
1420 Fifth Avenue, Suite 3400
Seattle, Washington 98101-4010
(206) 903-8800 (telephone)
(206) 903-8820 (fax)

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